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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,028	11/21/2003	Randy D. Jester	1725 (TI-02-3)	3210
40256 7.	590 04/27/2005		. EXAMINER	
FERRELLS, PLLC			RAYFORD, SANDRA M	
P. O. BOX 312 CLIFTON, VA 20124-1706			ART UNIT	PAPER NUMBER
,			1772	
		DATE MAILED: 04/27/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

·						
	Application No.	Applicant(s)				
	10/720,028	JESTER, RANDY D.				
Office Action Summary	Examiner	Art Unit				
	Sandra M. Nolan-Rayford	1772				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 28 Ja	nuary 2005.					
,						
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-30</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-30</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers		•				
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> </ul>	s have been received.					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date <u>3-16-05</u> . 6) Other:						

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

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### **DETAILED ACTION**

#### Claims

1. Claims 1-30 are pending.

### Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 16 March 2005 ("the last IDS") was considered by the examiner. The new rejections below are based on art cited therein.

# Withdrawal of Rejections

3. All of the 35 USC 103 rejections set out in sections 3 through 7 of the 29 October 2004 office action ('the last office action') are withdrawn in order to apply the new rejections below.

### New Rejections

### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-12 and 25-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Hausmann (pre-grant publication US 2002/0156195A1).

Hausmann was cited in the last IDS.

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Hausmann teaches blends containing ethylene-based polymers and cycloolefin polymers (title) that are useful as sealant layers and in film packaging (abstract). Films made from the blends are heat sealable (par. 0003). The cycloolefin polymers have glass transition temperatures of 0 to 300°C (par. 0028) and are preferably ethylene/norbornene copolymers (par. 0031). The blends are used to make sheets and films via extrusion and/or blowing (par. 0037). Its films can be bonded to each other (par. 0061).

A "sheet" is deemed to be a flat film.

The self-bonding process of claim 25 is anticipated by Hausmann's par. 0061.

The properties of claims 26-30 would be inherent in Hausmann's sheets/films because the same ethylene/norbornene copolymers are used to make them.

6. Claims 1-30 are rejected under 35 U.S.C. 102(e) as anticipated by Hirose et al (US 5,532,030).

Hirose was cited in the last IDS.

Hirose teaches multilayer laminates used in heat sealable (col. 35, line 17-18) packaging (title). The laminates contain an ethylene/cycloolefin copolymer (A) layer with a softening temperature of 0 to 180 °C (col. 3, lines 44-55) along with a thermoplastic polyolefin, such as polyethylene and/or polypropylene (col. 28, lines 66-67; col. 44, claims 6). Use of ethylene in (A) is disclosed at col. 23, line 5. The use of norbornenes in (A) is taught at col. 23, lines 18-23.

Hirose teaches that cycloolefin polymers are known to soften at temperatures near their glass transition temperatures.

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The Hirose laminates are made by coextrusion, blowing or sandwich molding (col. 32, lines 50-56) and may include adhesive layers (col. 32, lines 58-66).

The properties of claims 26-30 would be inherent in Hirose's (A) layers because the same ethylene/norbornene copolymers are used to make them.

# Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 9. Claims 1-11 and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hausmann.

Hausmann is discussed above. It fails to recite the narrow glass transition temperature range recited in applicant's claims.

In the absence of convincing objective evidence to the contrary, the use of sheets/films containing the copolymers of Hausmann, with optional additives to

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customize their transition temperatures for sealant/packaging applications, is deemed a matter of engineering choice.

The motivation to use the sheets/films suggested by Hausmann for sealant and packaging applications is found in the Hausmann abstract.

It is deemed desirable to make seals and laminates having glass transition temperatures that are suitable for the particular applications in which they will be employed in order to facilitate their manufacture and use for sealant and packaging applications.

The self-bonding process of claim 25 is anticipated by Hausmann's par. 0061.

The properties of claims 26-30 would be inherent in Hausmann's sheets/films because the same ethylene/norbornene copolymers are used to make them.

10. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al (US 5,532,030) in view of Hausmann.

Hirose is discussed above.

Hirose fails to teach that its laminates are easily heat sealed.

Hausmann is discussed above. Note that, in its abstract, it teaches that its copolymers have improved heat seal initiation properties.

Hirose and Hausmann are analogous because both deal with ethylene/norbornene copolymers used in sealant applications.

It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the copolymers of Hausmann in the laminates of Hirose in order to facilitate the production of the Hirose laminates.

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The motivation to use the Hausmann copolymers in the laminates of Hirose is found in Hausmann's abstract, where its copolymers are said to have improved heat seal initiation temperatures.

It is deemed desirable to make packaging with laminates having good heat sealability in order to facilitate packaging processes.

## Response to Arguments

11. Applicant's arguments with respect to claims 1-30 have been considered but are most in view of the new ground(s) of rejection.

### Citation as of Interest

12. The Derwent abstract of JP 0521484A (published 19 October 1993) teaches the use of blends containing thermoplastic resins and alpha-olefin/norbornene copolymers in heat sealable films. See the basic abstract and use/advantage section.

### Conclusion

Any inquiry concerning this communication should be addressed to Sandra M. Nolan-Rayford, at telephone number 571/272-1495. She can be reached Monday through Thursday, from 6:30 am to 4:00 pm, ET.

If attempts to reach the examiner are unsuccessful, contact her supervisor, Harold Pyon, at 571/272-1498.

The fax number for patent application documents is 703/872-9306.

S. M. Nolon-Royford
S. M. Nolan-Rayford
Primary Examiner

Technology Center 1700

10720028(20050423)